

Claims

1. A process for annealing a multilayer body which has a first layer and at least one second layer, through uptake of a quantity of energy by the multilayer body involving uptake of a first partial quantity of the quantity of energy by the first layer and uptake of a second partial quantity of the quantity of energy by the at least one second layers, wherein at least one of the second layer(s) has a defined absorption for a defined electromagnetic radiation, comprising the following process steps:

a) providing an apparatus for annealing a multilayer body, which apparatus comprises an energy source comprising a first energy source and at least one second energy source emitting the defined electromagnetic radiation, and a transparency body that is semi-transparent and has a defined transmission and a defined absorption with respect to the defined electromagnetic radiation;

b) arranging the multilayer body between the first energy source and the at least one second energy source, so that the first layer is arranged between the first energy source and the at least one second layer, and the at least one second layer is arranged between the second energy source and the first layer and that the transparency body is positioned between the at least one second energy source and the at least one second layer; and

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c) annealing the multilayer body using the energy source to supply the quantity of energy to the multilayer body.

2. The process as claimed in claim 1, in which at least one material of one of the layers of the multilayer body is
5 selected from the group consisting of glass, glass-ceramic, ceramic, plastic and/or metal.

3. The process as claimed in claim 1, in which, for annealing, the transparency body absorbs a defined quantity of energy, and the quantity of energy is supplied to the layer by
10 heat conduction and/or heat radiation.

4. The process as claimed in claim 1, in which, during the annealing, a measurement, which is dependent on the annealing, of a physical parameter of the apparatus is detected in order for the uptake of the quantity of energy during the
15 annealing to be controlled, and the quantity of energy is controlled.

5. The process as claimed in claim 1, in which at least one layer is brought into contact with a process gas.

6. The process as claimed in claim 1, which is carried
20 out as a process stage in an in-line process and/or a quasi-in-line process comprising at least two process stages.

7. The process as claimed in claim 1, in which a multilayer body is produced, comprising a first layer of at least one substance which is selected from the group consisting of
25 copper, indium, gallium, sulfur and/or selenium, and a second

layer comprising glass, a lateral diameter of the multilayer body being selected from the range between 0.3 m and 5 m.

8. A multilayer body having a first layer comprising at least one substance selected from the group consisting of copper, indium, gallium, sulfur and/or selenium, and a second layer comprising glass, a lateral dimension of the multilayer body being selected from the range between 0.3 m and 5 m, in particular from the range between 1.0 m and 5 m.

9. The process as claimed in claim 2, in which, for annealing, the transparency body absorbs a defined quantity of energy, and the quantity of energy is supplied to the layer by heat conduction and/or heat radiation.

10. The process as claimed in claim 2, in which, during the annealing, a measurement, which is dependent on the annealing, of a physical parameter of the apparatus is detected in order for the uptake of the quantity of energy during the annealing to be controlled, and the quantity of energy is controlled.

11. The process as claimed in claim 3, in which, during the annealing, a measurement, which is dependent on the annealing, of a physical parameter of the apparatus is detected in order for the uptake of the quantity of energy during the annealing to be controlled, and the quantity of energy is controlled.

12. The process as claimed in claim 2, in which at least one layer is brought into contact with a process gas.

13. The process as claimed in claim 2, which is carried out as a process stage in an in-line process and/or a quasi-in-line process comprising at least two process stages.

14. The process as claimed in claim 2, in which a
5 multilayer body is produced, comprising a first layer of at least one substance which is selected from the group consisting of copper, indium, gallium, sulfur and/or selenium, and a second layer comprising glass, a lateral diameter of the multilayer body being selected from the range between 0.3 m and 5 m.

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